

split

139.7

Date: Friday, 02/05/2008 9:50:07 AM
 User: Julie Lecocq

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services
 Job Number : 38982
 Estimate Number : 10281
 P.O. Number :
 This Issue : 02/05/2008 S.O. No. :
 Prsht Rev. : NC
 First Issue : 11 Type : MACHINED PARTS
 Previous Run : 37072
 Written By :
 Checked & Approved By : JULIE LECOCQ 08.5.02
 Comment : Est Rev: Pick: A 04.02.18 New issue KJ/DS

Drawing Name : BRACKET ASSEMBLY
 Part Number : D3183043
 Drawing Number : D3183 REV C1
 Project Number : N/A
 Drawing Revision : C1
 Material :
 Due Date : 30/05/2008 Qty: 24 Um: Each

(22)

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description:

1.0 M174B2000X01500 17-4 SS Bar



Comment: Qty.: 0.4812 f(s)/Unit Total: 11.5492 f(s)
 Material: 17-4 SS Bar per AMS 5604/5643
 (M17-4-B1.500x02.000)
 Identify for D3183-043
 Batch: M174773 x 26 blanks HA/SA 08/05/21

3 x M17478
 3 x M17473

M174773 x 22

(24)

2.0 BAND SAW BAND SAW



Comment: BAND SAW
 Cut blanks: (1.500" x 2.000") 5.500" long

SA/MA 08/05/05 (26 blanks)

(24)

3.0 HAAS1 HAAS CNC VERTICAL MACHINING #1



Comment: HAAS CNC VERTICAL MACHINING #1

1-Machine D3183-3 as per Folio FA322 and Dwg D3183
 Identify as D3183-3

2-Deburr

3-Scribe batch number

SA/MA

08/05/26

4.0 QC2 INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

SA/MA

08/05/26

Date: Friday, 02/05/2008 8:50:07 AM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BRACKET ASSEMBLY

Job Number: 38982

Part Number: D3183043

Job Number:



Seq. #: Machine Or Operation: Description :

5.0 QC8 SECOND CHECK



Comment: SECOND CHECK

cmk 08/05/30

(22)

6.0 D312121 Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total: 48.0000 Each(s)
Pick:

Qty Part Number Description Batch

2 D3121-21

Bolt

B38994 x 16

B39047 x 28

SD / H.A

08/05/29

7.0 D3183045 Bearing Assembly



Comment: Qty.: 2.0000 Each(s)/Unit Total: 48.0000 Each(s)
Pick:

Qty Part Number Description Batch

2 D3183-045 Bearing Ass

B38996 x 6

SD / H.A

08/05/29

8.0 SMALL FAB 1 SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1
Assemble D3183-043 as per Dwg D3183.

SD / H.A

08/05/29

9.0 QC5 INSPECT WORK TO CURRENT STEP

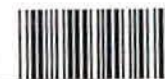


Comment: INSPECT WORK TO CURRENT STEP

SD 08/05/29/30

(22)

10.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

08/05/30

(22)

11.0 QC21 FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/05/30

Job Completion



08/05/30

DART AEROSPACE LTD		Work Order: 38982
Description: Bracket		Part Number: D3183-3
Inspection Dwg: D3183	Rev: C1	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
R0.190	+/-0.030	R.188	/			
R0.063	+/-0.010	R.063	/			
0.182	+/-0.010	.185	/			
0.070	+/-0.010	0.073	/			
0.100	+/-0.010	.100	/			
Ø0.201 x 0.100	+/-0.010	Ø0.201 x 100	/			
0.182	+/-0.010	.185	/			
5.32	+/-0.030	5.323	/			
5.036	+/-0.010	5.036	/			
2.120	+/-0.010	2.120	/			
1.290	+/-0.010	1.290	/			
0.365	+/-0.010	.366	/			
0.218	+/-0.010	.211	/			
1.030	+/-0.010	1.030	/			
1.90	+/-0.030	1.887	/			
1.012	+/-0.010	1.012	/			
Ø0.201 x 0.100	+/-0.010	Ø0.201 x 100	/			
0.786	+/-0.010	0.778	/			
Ø0.392	+0.002/-0.000	Ø0.393	/			
R0.19	+/-0.030	R.19	/			
3.954	+/-0.010	3.954	/			
0.162	+/-0.010	0.160	/			
R0.19	+/-0.030	R.19	/			
R0.25	+/-0.030	R.23	/			
4.26	+/-0.030	4.26	/			
2.080	+/-0.030	2.070	/			
1.155	+/-0.010	1.150	/			
0.162	+/-0.010	.162	/			
0.36	+/-0.030	0.355	/			
0.615	+/-0.010	.615	/			
0.435	+/-0.010	.436	/			
0.200	+/-0.010	.203	/			
0.381	+/-0.010	.372	/			
0.032	+/-0.010	0.030	/			

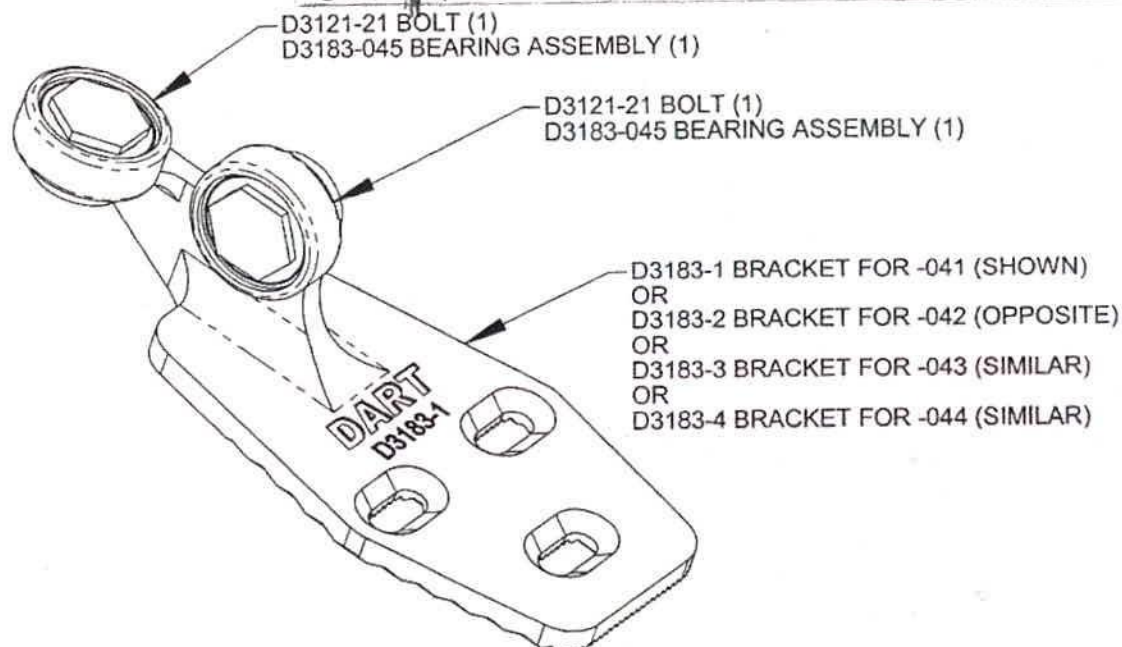
Measured by: S/N/H4	Audited by: gnd	Prototype Approval: N/A
Date: 08/05/23	Date: 08/05/26	Date: N/A

Rev	Date	Change	Revised by	Approved
	03.11.12	New Issue	KJ/RF	
	04.03.15	Changes as per revision C	KJ/JLM/RF	
	06.03.09	Dwg Rev update	KJ/JLM	
	01.01.28	0.182 dimension removed	KJEC/DD	

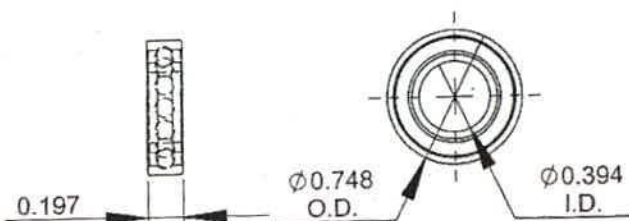
DART

DESIGN #	DRAWN BY CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3183	REV. C SHEET 1 OF 4
DATE 04.02.17	TITLE BRACKET ASSEMBLY		SCALE 1:1
A	03.01.24	NEW ISSUE	
B	03.06.17	REMOVE BEARING; 1.012 WS 0.882	
C	04.02.17	ADD -045/-9; 0.182 WAS 0.431	
C1	04.11.09	0.830 WAS 0.850	

RELEASED
04.03.01



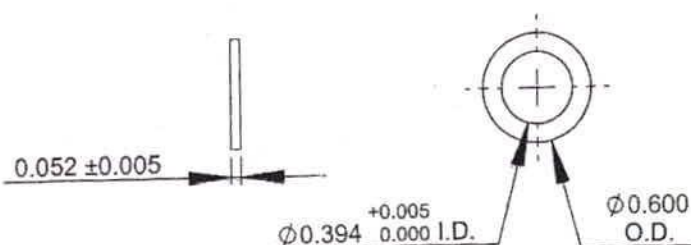
D3183-041 BRACKET ASSEMBLY (SHOWN)
D3183-042 BRACKET ASSEMBLY (OPPOSITE)
D3183-043 BRACKET ASSEMBLY (SIMILAR)
D3183-044 BRACKET ASSEMBLY (SIMILAR)



D3183-5 BEARING:
SPECIFICATION CONTROL DRAWING

- 1) SINGLE ROW, DEEP GROOVE, CONRAD TYPE, SHIELDED
- 2) POSSIBLE SUPPLIER: NSK P/N 6800ZE
- 3) ALL DIMENSIONS ARE IN INCHES

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 WORK ORDER
 NO. 38982



D3183-7 WASHER

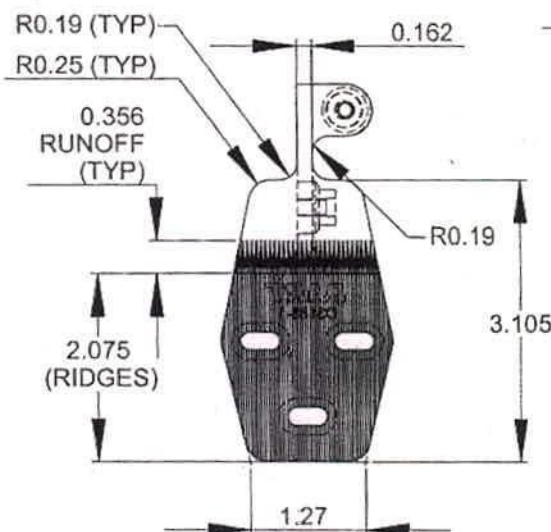
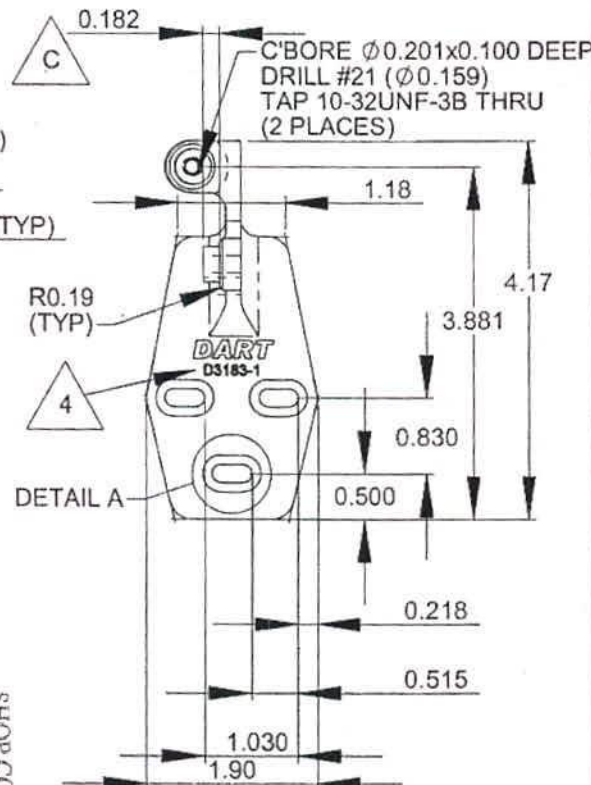
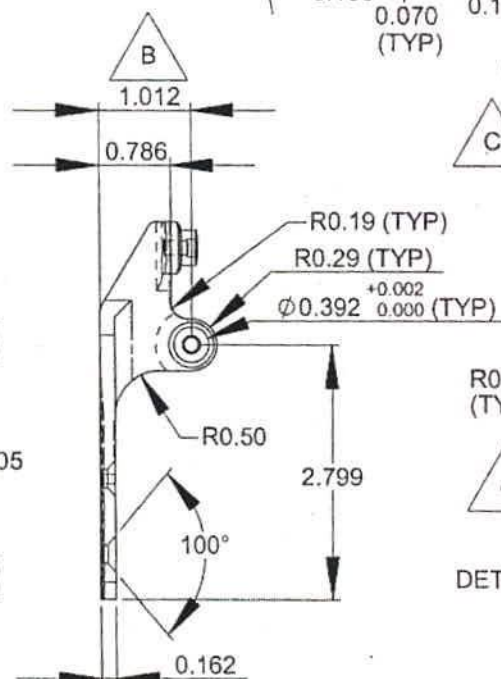
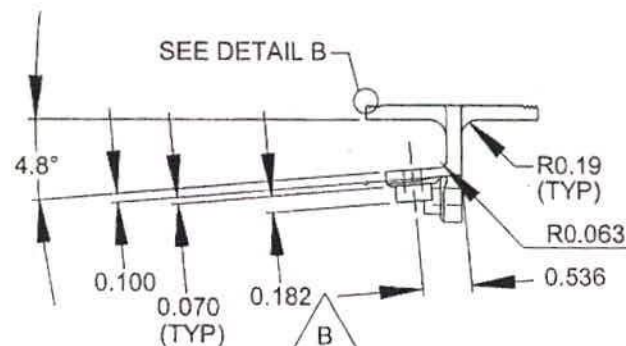
- 1) MATERIAL: AISI 303 ROUND BAR (M303R) ANNEALED
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES

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		HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. C
		D3183	SHEET 2 OF 4
DATE		TITLE	SCALE
04.02.17		BRACKET ASSEMBLY	1:2

RELEASED
4-03-01

D3183-1 BRACKET SHOWN
D3183-2 BRACKET OPPOSITE

- 1) D3183-1 CAN BE MADE FROM D3183-3
D3183-2 CAN BE MADE FROM D3183-4
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE STRENGTH = 150 ksi
MIN YIELD STRENGTH = 100 ksi
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 4) ENGRAVE DART P/N & LOGO AS SHOWN
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

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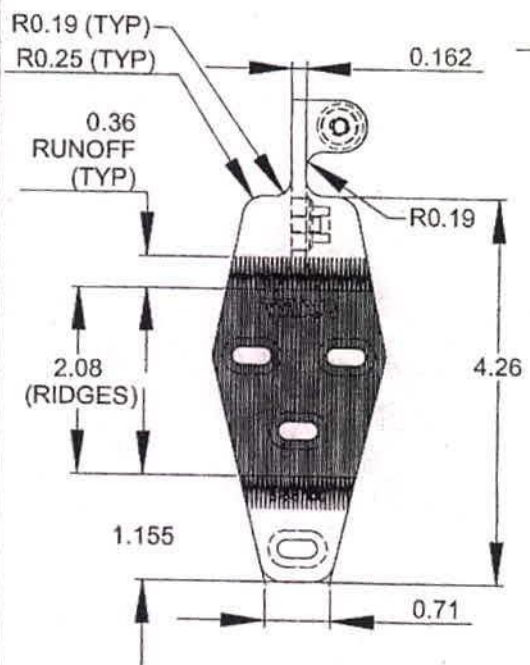
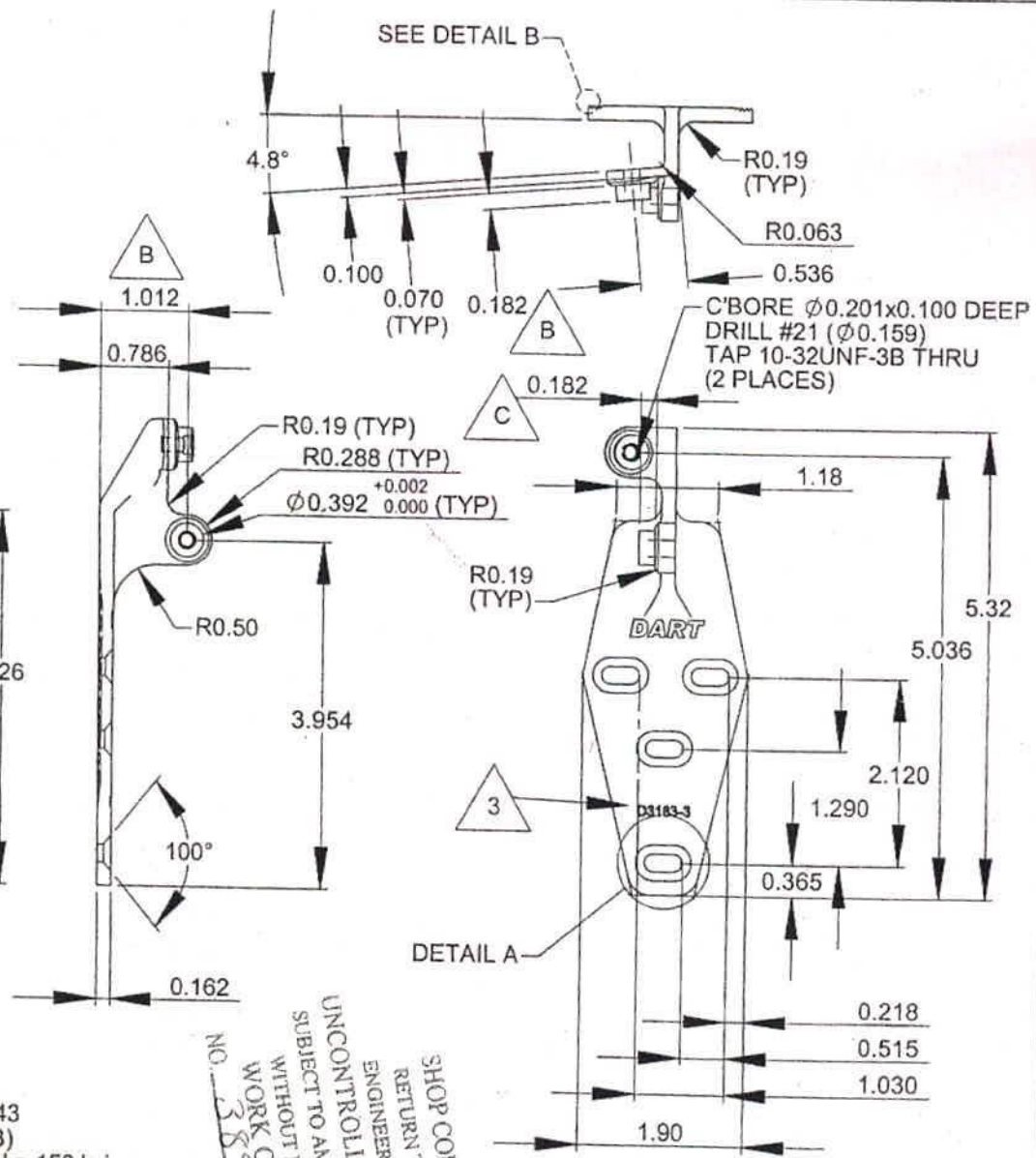
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04.02.17	D3183	SHEET 3 OF 4
TITLE	BRACKET ASSEMBLY	SCALE
		1:2



D3183-3 BRACKET SHOWN
(REPLACES BELL P/N 412-030-304-105)
D3183-4 BRACKET OPPOSITE
(REPLACES BELL P/N 412-030-304-106)

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE STRENGTH = 150 ksi
MIN YIELD STRENGTH = 100 ksi
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 3) ENGRAVE DART P/N & LOGO AS SHOWN
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

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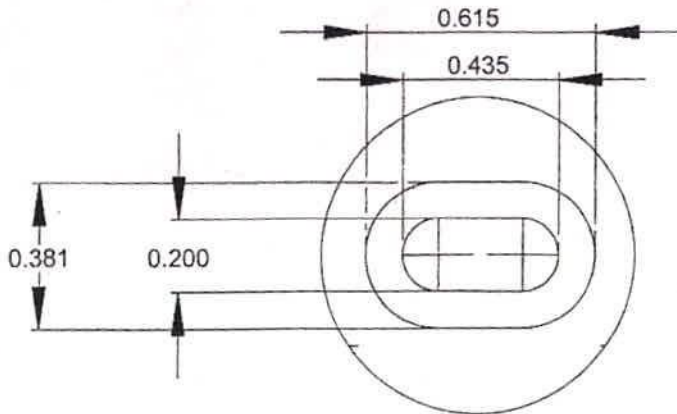
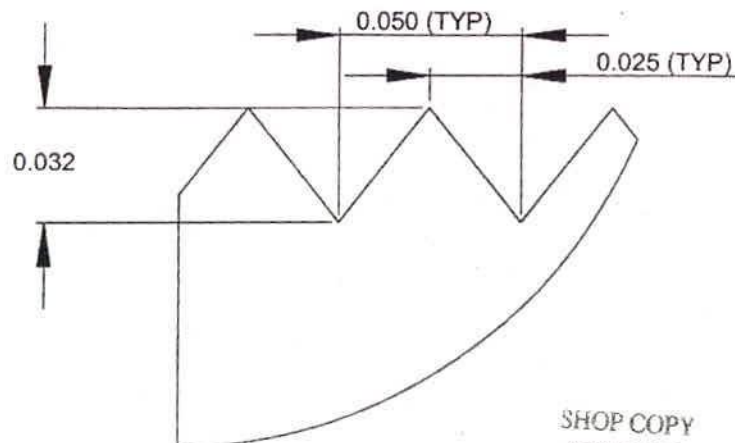
RELEASED
24.03.01

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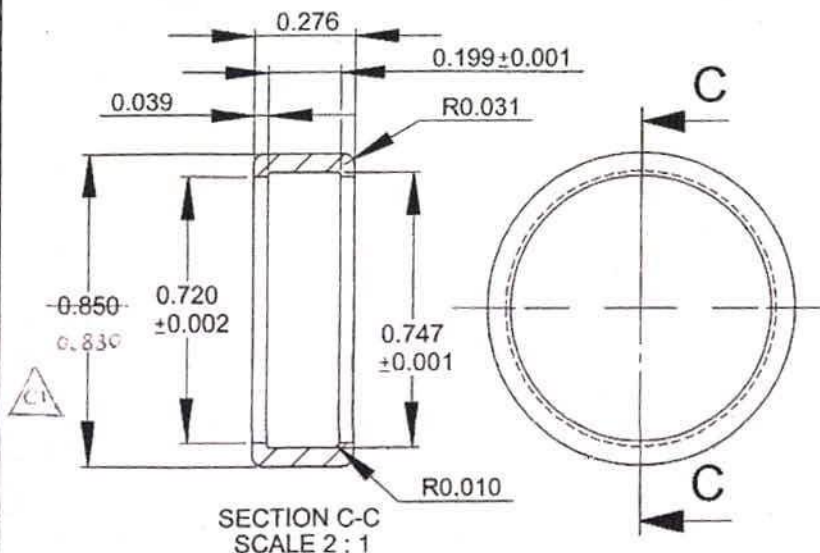
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DART

DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3183	REV. C SHEET 4 OF 4
DATE 04.02.17	TITLE BRACKET ASSEMBLY	SCALE 1:1	

**DETAIL A (2 : 1)****RELEASED**
04.03.01 *[Signature]***DETAIL B (20 : 1)**

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**D3183-9 CAP**

- 1) MATERIAL: DELRIN ROD, Ø1.00
(REF DART SPEC. M-DELRIN-R1.00)
- 2) TOLERANCES ARE PER DART QSI 018
UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

D3183-045 BEARING ASSEMBLY

- 1) ASSEMBLE D3183-5 BEARING AND
D3183-9 CAP

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WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: 3183-043 ~~D-3183~~ PAR #: _____ Fault Category: See main W/O NCR: Yes No DQA: _____ Date: _____
QA: N/C Closed: _____ Date: _____

WORK ORDER NON-CONFORMANCE (NCR)									
NCR: 38982									
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector	
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				
08/05/23	S.O	3 parts scrap 4 parts flew off the jig while machining. L.C. material		Scrap and Destroy and Replace QTY (2) B# M19478	SD 08/05/23	08/05/30		08/05/30	
08/05/23	S.O	1 part scrap. 4 axis off by .010" L.C. operator error		Scrap and Destroy and Replace QTY (2) B# M19478	SD 08/05/23	08/05/30		08/05/30	
08/05/25	S.O	2 parts scrap 4 parts flew off the jig while machining. reason: round corners on material		Scrap and Destroy and Replace B# M14773	MA 08/05/25	08/05/30		08/05/30	

NOTE: Date & initial all entries L.C. material